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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,553	07/19/2000	Henry Ptasinski	39630/RJP/E264	2058
23363	7590	03/03/2006	EXAMINER	
CHRISTIE, PARKER & HALE, LLP			REFAI, RAMSEY	
PO BOX 7068			ART UNIT	
PASADENA, CA 91109-7068			PAPER NUMBER	
			2152	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/619,553	Applicant(s) PTASINSKI ET AL.	
	Examiner Ramsey Refai	Art Unit 2152	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 and 43-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22, 43-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

Responsive to Request for Continued Examination (RCE) received on January 27, 2006. Claims 1, 3-4, 10, 12, 14-15, 21, 43, 45-46, 52, 54, 56-57, and 63 have been amended. Claims 1-22 and 43-64 remain pending further examination.

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
2. Claims 1-22 and 43-64 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 1 is directed to “transmitting *the link integrity indication frame* based upon determining the node state status” in line 17. The node state status is a result of the initial transmission of a link integrity indication frame transmitted by the first node to the one or more network nodes. It is not clear how the step of transmitting the link integrity indication frame in line 17 is possible since this step would be based on the node state status received from the one or more network nodes as a result of the initial transmitting of a link integrity indication frame. It appears that the Applicant may have intended to state that *a second or subsequent* link integrity indication frame is transmitted based on the result of the node state status. Clarification is respectfully requested.

Claims 12, 43, and 54 contain similar issues as claim 1 above, therefore are rejected under the same rationale.

Claims 2-11, 13-22, 44-53, and 55-64, these claim depend on the above rejected claims, therefore are rejected under the same rationale.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-22 and 43-64 are rejected under 35 U.S.C. 102(e) as being anticipated by Compliment et al. (US Patent 6,360,260), hereinafter referred to as Compliment.

6. In regards to claim 1, Compliment discloses a method of verifying connectivity between a first node and one or more network nodes, comprising:

providing periodic time intervals at the first node (**column 8 lines 4-11, timing means provided for creating and counting time intervals;**);

counting elapsed periodic time intervals since transmission of a link integrity indication frame to produce a count for a first node, the link integrity indication frame being a frame which, when transmitted by the first node, can be received by the one or more network nodes on the communications network and which contains a source identifier that uniquely identifies the first node (**Fig 8 is a representation of the frame sent, see also column 6 lines 9-23;**);

receiving frames from the one or more network nodes and maintaining during each periodic time interval a node state status and current received frame source identifiers (**column 7 lines 1-26, frames are received and the management table records node status and an identifier;**);

determining the node state status upon the expiration of a predetermined elapsed time interval (**column 7 lines 11-21, upon expiration the node state is checked on the connection state field;**); and

transmitting the link integrity indication frame based upon determining the node state status as not being indicative of having received frames from a plurality of the one or more network nodes during the predetermined elapsed time interval (column 7 lines 11-21, also column 9 line 49 - column 10 line 51, a connection state field maintains a status of being indicative of traffic. Compliment discusses multiple listings in the Management table, which can be seen in Figure 7, having spots for multiple stations, each of which is cleared before a message is sent to a set of receiving management stations, which can all reply within the timer period);

wherein, when transmitted, the link integrity indication frame resets the count of each of at the first node and the one or more network nodes (column 3, lines 4-30, Figure 6, column 10, lines 1-15, column 12, line 20-23) .

7. In regards to claim 2, Compliment discloses the source identifier is a source address and the current received' frame source identifier is a current received frame source address (column 6 lines 12-14 show both a source and destination address).

8. In regards to claim 3, Compliment discloses counting the elapsed periodic time intervals includes: incrementing a counter every time a periodic time interval elapses and the first node has not sent a link integrity indication frame during the elapsed time interval (Fig 6 shows incrementing the counter, step 370);

resetting the counter whenever the network node transmits a link integrity indication frame (Fig 6 shows initializing or resetting the timer to 0).

9. In regards to claim 4, Compliment discloses maintaining a node state status includes: establishing a node initial state status upon receipt of a frame from the one or more network nodes on the network (column 6 lines 49-62, establishing a initial state is shown);

upon receiving a subsequent frame within the predetermined elapsed time interval, comparing the maintained current received frame source address with a subsequent frame source address (**Fig 5 shows the comparison method, also see column 6 lines 49-62**);

if the comparing indicates a same source address, the node state status remains unchanged (**Fig 5, column 6 lines 49-62**);

if the comparing indicates a different source address, the node state status changes to being indicative of having received frames from a plurality of the one or more network nodes during the predetermined elapsed time interval and transmitting the link integrity indication frame is suppressed (**column 7 lines 11-21, a state table is updated**).

10. In regards to claim 5, Compliment discloses determining the node state status as not being indicative of having received frames from a plurality of the one or more network nodes during the predetermined elapsed time interval includes providing a logic state machine having a plurality of states including a down state indicative of a non-functional network link and a plurality of up states indicative of functional network links, the states being transitional there between based upon predetermined network node status, expiration of periodic timing intervals and receipt of frames by the first node (**column 7 lines 11-21, a logic state table is provided to maintain status of nodes**).

11. In regards to claim 6, Compliment discloses maintaining a current received frame source address includes recording the current received frame source address in a memory table (**column 7 lines 53-60**).

12. In regards to claim 7, Compliment discloses the first node is a node on a broadcast network (**Fig 1 shows both a multicast and a point to point network**).

13. In regards to claim 8, Compliment discloses the first node is a node on a point-to-point network (**Fig 1 shows both a multicast and a point to point network**).

14. In regards to claim 9, Compliment discloses the communication network is a multi-layer protocol communication network (column 2 lines 53-60, Fig 1, the shown network is a SNMP which can utilize multi-layers, such as a hierarchal format).

15. In regards to claim 10, Compliment discloses the transmitting the link integrity indication frame is performed at a data link layer of the multi-layer protocol communication network (column 6 lines 24-36, the transmission is performed by a management station at a data link layer).

16. In regards to claim 11, Compliment discloses the first node and the one or more network nodes whose connectivity is being verified are connected by transmission medium from the group of telephone wire, shielded twisted pair, unshielded twisted pair, cable, power line, optical fiber, or wireless medium (Fig 1, column 4 line 59 - column 5 line 23, shows a wired network in which the invention is implemented).

17. In regards to claims 12-22, 43-64, these claims contain similar limitations as claims 1-11 above, therefore are rejected under the same rationale.

*Response to Arguments*

18. Applicant's arguments have been fully considered but they are not persuasive.

- In the remarks, the Applicant argues in substance that Compliment does not disclose a link integrity indication frame, which resets the count for each of the first node and the one or more network nodes.
- In response, the Examiner respectfully disagrees. Compliment teaches that the predetermined timer interval is reset upon expiring. Compliment further teaches that the registration process is restarted upon expiring of a Watch Dog timer. The registration process involves an initial setting of the Watch Dog timer to a certain value. Therefore Compliment meets the scope of the claimed limitation. (See column 3, lines 4-30, Figure 6, column 10, lines 1-15, column 12, line 20-23) .

*Conclusion*

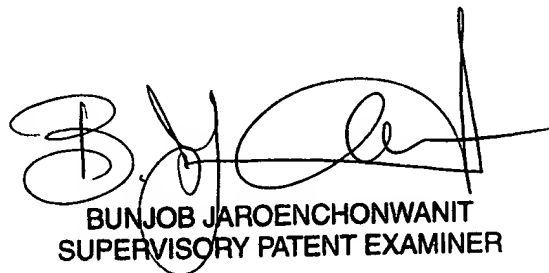
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramsey Refai  
Examiner  
Art Unit 2152

RR  
February 27, 2006

  
BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER